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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,331	12/12/2003	Donald R. Glynn	DWE/GLYNN-CIP	9068

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EXAMINER	
MENON, KRISHNAN S	

ART UNIT	PAPER NUMBER
1723	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,331	GLYNN, DONALD R.	
	Examiner	Art Unit	
	Krishnan S. Menon	1723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *14-18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-13, dewatering system, classified in class 210, subclass 295.

II. Claims 14-18, method of extracting permeate, classified in class 210, subclass 651.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used for another materially different process such as ultrafiltration of fruit-juices, and the process as claimed could be practiced with another materially different apparatus such as a coalescer filter.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Douglass Eggins, attorney of record, on 3/14/06 a provisional election was made without traverse to prosecute the invention of group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3,5, 7, 12 and 13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Falletti (US 4,865,742)

The claims are recited generally in means plus function language which revokes 35 USC 112, sixth paragraph, and therefore, the elements recited will be limited by the corresponding disclosure in the specification or equivalent thereof.

Falletti teaches a recirculating system for separating emulsions having a stainless steel housing (figure, column 3 lines 13-22), ceramic membrane (column 3 lines 40-53), liquid receiver means (22, figure 1) pump means, liquid receiver means (see figure), and chemical treating means (tank 24, figure 1, or line 18; column 3 lines 27-30). The contaminated mixture is water and oil (abstract). (Please note that 'cleaning chemical' and 'water with oil' are intended use of the system, and are not patentable limitations). Compressed air backpressure means – see column 4 lines 13-25.

Regarding claims 4 and 9, two reservoirs: one reservoir 24 with air supply is connected to the receiving means 22, and the second, a reservoir for the detergent, which is not shown, but implied, connected to the valve 21, which would be in the "ring". "[I]n considering the disclosure of a reference, it is proper to take into account not only

specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976). Rest of the claim is functional language, which the system is capable of.

2. Claims 1-5,7-10,12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Kiderman et al (US 2003/0132175).

Kiderman teaches an oil-water separation system (figure 3) in closed loop recirculation having cross flow ceramic membranes, pressurized feed tank (76) having high and low pressure switches, pumps, back-flush and chemical cleaning systems having plurality of reservoirs (system 84) as claimed: see paragraphs 20-23.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falletti.

Instant claims differ from the teaching of Falletti in the 'pair of circulation rings' and having more than one membrane in series. However, having two such circulation rings is purely duplicating the systems, and is not patentable. Having more than one membrane in series is only optimizing the membrane area and residence time requirement depending on the rate of processing required or the feed fluid through-put. (Note: mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*; In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)). Discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art. In re Boesch and Slaney, 205 USPQ 215 (CCPA 1980); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falletti in view of Haney (US 6,099,733)

The claim differs from the teaching of Falletti in the plurality of chemical reservoirs. However, having more than one chemical cleaning reservoir would be obvious to one of ordinary skill in the art, which would depend on the cleaning requirement for the various contaminants in the feed stream. Haney teaches multiple cleaning reservoirs as known in the art (L, figure 1: prior art). It would be obvious to one of ordinary skill in the art at the time of invention to use the teachings of Haney in the

teaching of Trulson for effective cleaning of the membranes and automated operation of the system.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falletti as applied to claim 5 above, and further in view of Trulson et al (US 3,977,967).

The claim differs from the teaching of Falletti in the double O-ring for the membrane. Trulson teaches O-ring seals (fig 3) and gaskets (fig 5 and 6) in a membrane apparatus for cleaning wastewater. It would be obvious to one of ordinary skill in the art at the time of invention to use the teaching of Trulson in the teaching of Falletti to have a compact design with tubes in close proximity to each-other and to the housing to save space (see col 10 line 56-col 11 line 2), and because Falletti does not teach the details of the end fittings. Regarding the two O-rings, Trulson does not specifically teach putting in two O-rings, but teaches the gasket in Fig 5 and 6, which would be equivalent to the two O-ring structure recited in claim 15, because it provides the same compact, close-proximity design. In this case, the prior art element performs the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification. Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S. Menon whose telephone number is 571-272-1143. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Krishnan Menon
Patent Examiner
3/14/06